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Educational Technology

Evaluation Tool

Examining Progress Towards Future Ready Professional Learning

U.S. DEPARTMENT OF EDUCATION

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November 2014

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Why Evaluate?

By this point in your use of the *Future Ready Schools: Empowering Educators Through Professional Learning* toolkit, your leadership team composed of district, school, and teacher leaders will have used your self-assessments to plan and begin to implement professional learning and collaboration activities intentionally aligned with your goals and with best practices for professional and connected learning.

The next step is to collect, analyze, and share evidence of the actual value these activities are creating for your educators and students. In other words, it is time to evaluate the effectiveness of your work. The types of value that are being created include the immediate satisfaction participants experience, the knowledge they gain, the changes in practice they make through applying that knowledge, the impact of those changes on their effectiveness in improving student learning outcomes, and the changes made to beliefs and policies that are justified by such results. By identifying strategies using the continuum tools, you have already begun to consider evidence you might collect. This evaluation tool provides a framework for systematically working with such evidence.

There are two primary reasons to evaluate the efficacy of professional and connected learning:

- **To make evidence-based decisions about how to improve the activities you are implementing:** What is working that you should do more of? What can be deemphasized in order to focus effort on more promising practices?
- **To share effective practices and comparison of results:** What difference has your investment in implementing new strategies made? Why have certain activities proven effective, and how could funders and other districts learn from and build on your successes?

Evaluating professional learning and collaboration activities that integrate learning through online communities and networks can be challenging in two ways:

1. Research shows that the types of value that these activities create are diverse and not always predictable (Office of Educational Technology, 2011a). We need to capture the different kinds of value that are being created and examine how they compare with what we intended. To what extent are we realizing our goals? What other kinds of value are being created that we did not anticipate but upon which we might build?
2. Many conventional educational research designs are not efficient enough to provide actionable information in a timely fashion at a sustainable cost. We need to put into place an evaluation process that is empirically grounded but also appropriate to the district's needs and assets.

This evaluation tool presents a process of self-evaluation that captures diverse types of value fairly rapidly, as part of the process of implementing professional learning and collaboration programming to increase student learning. The tool can provide a useful complement to more traditional evaluation approaches, which you might also wish to consider. This tool is part of the *Future Ready Schools: Empowering Educators through Professional Learning* toolkit and can be found at tech.ed.gov/FutureReady/Professional-Learning.

Instructions for Use

1. First, review this entire tool so that you become familiar with the possibilities for use of the evaluation framework and the following:
 - Five types of value created through participation in professional learning activities
 - Three kinds of evidence—indicators, stories, and artifacts—that can document the value of the professional learning
 - Many ways that you can collect, measure, analyze, and share evidence of the value of the professional learning
2. Use the Indicators Worksheet on page 8 to choose your indicators and determine how you will gather the necessary data to track them.
3. Consider how you will make use of value creation stories, pages 9–10, and artifacts, page 11, in relation to the indicators.
4. Use the Portfolio Planning Worksheet on page 14 to help you determine what you want your portfolio to communicate and which audiences you want it to address.
5. Consider how you can make ongoing use of the toolkit to:
 - Make evidence-based decisions about how to improve the professional learning activities you are implementing
 - Share effective professional learning strategies and comparison of results

Evaluation Framework

This tool introduces you to a simplified version of the evaluation framework developed by Wenger, Trayner, and de Laat (2011), building upon Kirkpatrick (1976, 1994). These internationally recognized experts on professional learning and collaboration developed their value creation framework to address the dual challenges of attending to the diversity of types of value and providing systematic analysis that is timely and efficient. Using this framework as a guide, you will determine the evidence you will collect over time, how you will make sense of the evidence, and how you will share your results with others.

The value creation framework defines five types of value that are created through participation in professional learning and collaboration activities. (The authors refer to these types as cycles of value to emphasize that they are interconnected.) The types of value vary from that which participants experience right away as they participate in an activity (e.g., a sense of excitement) to the ultimate results that the goals to which activities are aligned aim to improve (e.g., graduation rates). The five types of value are defined in Table 1.

To document the value created by your professional learning and collaboration activities, you will collect three kinds of evidence: indicators, stories, and artifacts.

Table 1. Types of Value

Type	Definition	Example
Immediate: Activities and interactions	Value educators experience immediately through their participation	A teacher feels less isolated because he was provided the opportunity to connect, via webinar, with other teachers who are working to overcome similar challenges.
Potential: Knowledge and social capital	Value educators receive that could prove useful in the future; this might be new knowledge, skills, resources, or relationships	During an online workshop, a principal learned about a new classroom observation process that she may employ in future teacher evaluations and was introduced to two experienced school leaders whom she can access for advice.
Applied: Changes in practice	Value generated when educators apply what they have learned or developed in the professional practice	A teacher uses new ideas learned, via a Twitter chat, to adapt two lesson plans in her classes.
Realized: Performance improvement	Value that results from the application of what has been learned or generated	Digital literacy assessment scores improve across the district after implementation of a codeveloped, statewide bring-your-own-device acceptable use policy.
Reframing: Changes in what is valued	Value created when educators redefine what success means as a result of their collaboration	A school-based professional learning community, focused on literacy, connected with other professional learning communities through an online network, which resulted in the integration of literacy instruction across all subjects, not just language arts.

Kinds of Evidence: Indicators

Indicators are specific measures that suggest that value of a given type has been generated. Observing a change in an indicator does not necessarily mean that the change was caused by the activities in which educators participated. Indicators track what value has been generated during the period being evaluated. The other two types of evidence, stories and artifacts, help you determine how and why that change occurred.

For each of the types of value, you will need to identify appropriate indicators that you will track. There is no standard set of indicators. You will need to choose indicators that align with the specific goals and strategies on which you have chosen to focus. To help you get started, Table 2 lists a number of indicators, for each type of value, that may be appropriate for evaluating the value created by professional learning and collaboration that integrates communities and networks with more formal forms of professional development.

Table 2. Types of Value, Indicators, and Metrics

Type of Value	Sample Indicators ¹	Possible Metrics ²
Immediate	Level of participation	<ul style="list-style-type: none"> • Number of members of a community or network • Number of participants in an activity • Number of active participants (i.e., those participants who have made multiple comments) • Characteristics of participants (e.g., Do they match the demographics of the larger group of educators who need to be involved?)
	Level of engagement	<ul style="list-style-type: none"> • Intensity of discussion (measured through analysis of strength of sentiment or average time between comments) • Length of threads • Length of website visits • Interest and enjoyment of participants
	Quality of interactions	<ul style="list-style-type: none"> • Perceptions of relevancy of the experience (e.g., collected through an evaluation survey) • Degree to which topics align with targeted improvement goals

¹ These indicators are simplified and adapted from the set of “typical” indicators in Wenger, Trayner, and de Laat (2011), with the sources of data drawn from actual practice with educational professional learning programming, online communities, and social networks.

² A range of free tools and accessible techniques are available to collect data such as these. For example, Google Analytics can help track website usage, SurveyMonkey can administer surveys, and NodeXL can be used for social network analysis. A fuller account of evaluation data collection methods and tools can be found in *Resources and Tools for Evaluation of Online Communities of Practice* (Office of Educational Technology, 2011b).

Type of Value	Sample Indicators	Possible Metrics
Potential	Skills acquired	<ul style="list-style-type: none"> • Badges or other microcredentials earned • Number of completed skill-building activities • New certifications in areas topically related to professional learning activities
	Content exchanged	<ul style="list-style-type: none"> • Number of views of resources or discussions • Number of downloads of or links clicked to resources • Number of resources or discussions added
	Types, intensity, and structure of collaborative relationships (as determined through techniques such as social network analysis ³)	<ul style="list-style-type: none"> • Number of connections (e.g., joint participation in events, referencing each other's contributions, collaboration) between educators and with other educators within larger networks • Degree to which groups within a larger network are connected to each other • Degree to which discussions and activities are decentralized (e.g., work through connections with peers rather than just facilitators) • Emergence of participants with important roles (e.g., linking two otherwise unconnected groups, such as mathematics and art teachers)
Applied	Implementation of advice, solutions, and insights	<ul style="list-style-type: none"> • Self-reports of use of ideas from activities and feedback from leaders and participants (either shared through subsequent activities or collected by facilitators) • Increased referencing of school improvement goals • Number and types of digital badges earned that provide evidence of application • Discussions and resources include new language aligned with goals
	Innovation in practice	<ul style="list-style-type: none"> • Self-reports of innovations in practice influenced by professional learning and collaboration activities (either shared through subsequent activities or collected by school and district leaders) • Professional learning and collaboration activities, products, and applications to practice referenced in performance goals • New content and tools reflecting innovations shared • Discussions and resources include new and innovative language aligned with goals
	Use of social connections	<ul style="list-style-type: none"> • People sharing or initiating collaborations based on their own practice (e.g., Tweeting pictures of student work) • Informal collaborative production of resources shared with network • Educator-initiated formation of groups with tangible outputs

Type of Value	Sample Indicators	Possible Metrics
	Application and adaptation of resources	<ul style="list-style-type: none"> • Self-reports of use of resources or ideas from activities (e.g., in comments on a website where a resource is posted or in conversation during an online meeting) • Level of utilization by students of referenced resources (e.g., as evidenced by inclusion in a shared curriculum) • Sharing of adapted versions of resources
	Innovations in systems	<ul style="list-style-type: none"> • New processes that incorporate ideas and resources generated through professional learning activities (e.g., sharing of observed innovative practice by all principals doing their rounds across the district, through the use a blog) • New policies (e.g., an acceptable use policy that unblocks a social network from which educators say they are benefiting)
Realized	Individual performance	<ul style="list-style-type: none"> • Student performance aligned with targeted goal(s) (e.g., results from state and local assessments that aligned to high-quality learning standards, graduation, and college placement rates) • Teacher quality ratings • Influence on practice of other educators (e.g., as measured through mentions on peer self-assessments) • Relationship between achieving goals and meeting standards related to professional collaboration and leadership and other evaluation metrics (e.g., an observation protocol, value-added measures)
	Organizational performance	<ul style="list-style-type: none"> • Efficiency in implementing new processes and generating new resources • Modifications in local policy that enable connected learning • Cohesiveness and coherence of individual results across the school and district • Degree and speed of replication of effective practices and reuse beyond the individual classroom and school • Student, parent, and community satisfaction
Reframing	Shared aspirations	<ul style="list-style-type: none"> • New goals at the subject, school, and district levels that arise out of professional learning interactions • Changed vision of excellence (e.g., a vision that includes increased student voice and choice) • Changed scope of perceived responsibility (e.g., teachers see responsibility for school, district, and state outcomes and the overall state of their profession, not just their own classroom and students) • Changed expectations of students, parents, and community leaders

Type of Value	Sample Indicators	Possible Metrics
	Assessments	<ul style="list-style-type: none"> • New processes for meeting state recertification requirements • Changed hiring criteria (e.g., experience with connected learning actively sought when recruiting teachers, noting value and reduced professional learning costs to bring aboard new district employees) • Revised teacher and principal evaluation systems • New school rating processes
	Strategy and culture	<ul style="list-style-type: none"> • New strategic or conceptual frameworks that guide work across the organization (e.g., a set of principles of learning that incorporates aspects of social learning) • Innovations and structural changes survive changes in school and district leadership

³ For a brief introduction to social network analysis using free software employed in Connected Educators project research, see Hansen, Shneiderman, and Smith (2011). For a more comprehensive introduction, see Wasserman and Faust (1994).

Indicators Worksheet

Instructions for Use

Use the Indicators Worksheet to choose your indicators and determine how you will gather the necessary data to track them. Complete an Indicators Worksheet for each of the strategies on which you have chosen to focus your professional learning and collaboration initiative. Choose two to five indicators to track for each type of value and at least one metric and data source for each indicator. (An example of a completed entry for an indicator is included in italics.)

ALIGNED IMPROVEMENT GOAL:				
PROFESSIONAL LEARNING STRATEGY:				
Type of Value	Indicator	Metric	Data Source(s)	Collection Plan (e.g., frequency, methods and tools, responsibility)
Immediate	<i>Level of participation</i>	<i>Number of online minicourses completed successfully by teachers</i>	<i>Digital badges earned by teachers associated with the courses, issued by the course providers (including the district itself)</i>	<i>Director of professional development requests that teachers share their badge collections with her and generates a monthly tally</i>
Potential				
Applied				
Realized				
Reframing				

Kinds of Evidence: Stories

Value creation stories show how participation in the activities of a professional learning community or network has changed and benefited an individual educator. These stories suggest what caused changes in the indicators being tracked and how the different types of value are connected.

For example, read Chuck's value creation story below:⁴

- Chuck shared how he enjoyed conversations within an online community space (immediate value through a high level of engagement).
- Through those conversations, he learned about formative assessments (potential value through accessing resources).
- He then applied some of the new practices these tools enabled in his own classroom (applied value through implementation of solutions).
- This led to students benefiting from the assessments (realized value through improved student performance).
- The benefit caused him to have a deeper commitment to assessment as central to the learning process (reframing value through change aspirations).
- He also convened colleagues locally to work on assessment (applied value through use of social connections).
- This led to other teachers increasing their abilities to employ assessments in their classrooms (potential value through skill acquisition).

There are a number of methods for collecting value creation stories. Leaders can administer surveys or conduct interviews with educators. Alternatively, telling and discussing stories can become a professional learning activity in itself, helping the community or network members collectively understand directly what is working and what could be changed.

⁴ For a more detailed account of value creation stories, see *The Connected Community* (Office of Educational Technology, n.d.), which summarizes research from which this example is drawn.

Value Creation Story Form

Instructions for Use

The Value Creation Story Form⁵ offers a set of basic questions that can prompt educators to share their experiences and the effects the experiences have created. These questions can be used to create a survey, as the basis of an interview protocol, or as prompts in group activities. The form can be customized to reference specific goals and metrics you have identified. Educators may tell more empirically grounded stories if you encourage them to make reference to specific indicators and artifacts that are also part of your evaluation.

Name (the educator telling or sharing the story)	
Context (group, community, network, or event)	
Role (participant, facilitator, or observer)	
What meaningful activities did you participate in?	
What specific skills or insights did you gain? What access to useful information or material?	
How did this influence your practice? What difference did it make to your performance? What did it enable that would not have happened otherwise?	
How did this contribute to your success? • Personal, professional? • Organizational? Key metrics?	
Did your experience change your sense of what success is? • Personal, professional? • Organizational? Key metrics?	

⁵ Reproduced, with permission, from materials developed by Etienne and Beverly Wenger-Trayner.

Kinds of Evidence: Artifacts

Artifacts are whatever tangible products of professional learning and collaboration activity provide context for understanding the indicators and value creation stories. They offer evidence to support the interpretations made in value creation stories (e.g., through illustrating a change in student performance by presenting examples of student work). Artifacts also provide context for understanding changes in indicators. For example, a video of a site-based, cross-subject professional learning community meeting might demonstrate how new collaborative relationships are coming into being and influencing practice. Such a video might be recorded for the purpose of evaluation, but, in most cases, artifacts are a natural byproduct of the activity itself.

Some types of artifacts you might want to collect include the following:

- Professional development programming and policy planning documents
- Individual educators' professional learning plans
- Audio and video recordings of online or face-to-face professional learning activities
- Transcripts of Twitter chats, webinar backchannels, and other online conversations
- Written, audio, and video reflections on professional learning and collaboration activities
- Instructional materials (e.g., lesson plans, learning objects, assignments, reflections)
- Video recordings of classroom teaching
- Student work
- Rubrics and other scoring and grading protocols
- Evidence submitted to earn digital badges that recognize professional learning
- Policy documents (e.g., an acceptable use or teacher recertification policy)
- Teaching and principal evaluation materials

Thinking, early in the process, about what types of artifacts will be helpful in understanding and communicating the results of your work will allow you to plan to capture an archive of artifacts that you can draw on in your evaluation.

ANALYZING EVIDENCE

Together, well-chosen indicators, stories, and artifacts should provide a rich picture of the nature and extent of value generated by your professional learning system, helping you determine how that value was created and how it advances your improvement and innovation goals. Analysis of the evidence you have collected can demonstrate the return you have received on the investments in professional development. More important, however, the evidence should reveal patterns in the characteristics of professional learning activities that contribute to generating desired forms of value that can guide ongoing improvement of your system.

The level of formality of analysis varies. You may choose to statistically analyze quantitative indicator data and use rigorous procedures for coding the content of stories and artifacts. Alternatively, you might interpret the evidence through seeking consensus in discussions of it within your leadership team or with various stakeholder groups. The appropriate form of analysis depends on the analytical capacity available to the teams and the purposes and audiences for the analysis. For more formal analysis, teams may wish to consult a handbook, such as *Research Design* (Creswell, 2014). For the deliberative approach to interpretation, the techniques for discussing data about student learning surveyed by Allison, Besser, Campsen, and Cordova in *Data Teams* (2010) may be helpful.

COMMUNICATING RESULTS

You will use a digital portfolio to present your evidence and analysis. Your professional learning system portfolio will provide an accessible and authentic account of your results and will enable readers to dig down into the details of the activities you have supported and the effects they have had on professional practice. The ability to systemically present diverse types of evidence linked to a set of goals that define success from the author's perspective is a strength of the digital portfolio (Cambridge, 2010). The portfolio enables you to organize and make accessible your indicator data, stories, and artifacts, with your interpretations of them guiding the reader's examination.⁶ The portfolio also provides a place to reflect on your progress and share plans for further improvement.

Although they are most frequently used as records of individual learning, portfolios have been employed successfully to represent organizational performance as well. For example, in the late 1990s, a number of public comprehensive universities across the United States created online institutional portfolios that documented the overall performance of their higher education institutions in a way that was highly accessible to the university community and the general public and also provided a sufficiently rigorous account to have played a central role in several successful reaccreditation processes (Kahn, 2001).

Digital portfolios generally are organized in a set of linked webpages hierarchically arranged into a set of categories and subcategories, with frequent links to artifacts and pages in other sections to demonstrate conceptual and evidentiary links. Portfolios can be developed using dedicated e-portfolio systems (e.g., Digication or Pathbrite); within existing Web content management systems (e.g., Drupal or Schoolwires); as static websites; or using a variety of free, general purpose tools, such as blogging platforms (e.g., WordPress), website builders (e.g., Google Sites), or Wiki tools (e.g., Wikispaces). Simpler tools are likely to work better for this kind of portfolio, although providing a means for readers to make comments on specific sections or pages could be very useful for stakeholder engagement.

One possible arrangement for a professional learning system portfolio is to make your chosen improvement goals the top-level categories, then to include the professional learning strategies used to advance the goal as subcategories, and the themes found in the evidence as a third level, providing examples from the evidence and linking to complete versions specific artifacts, stories, and indicators, when appropriate, to provide support for the interpretation. If your project focuses on a single goal, you could make the strategies the top level. If you have zeroed in on a particular strategy, the patterns you found in the evidence could provide the overarching organization. Alternatively, you might organize your portfolio so that different audiences experience it differently (e.g., funders versus teachers) or according to the types of professional learning activities included within your system (e.g., online short courses and site-based professional learning community meetings).

⁶ A print-based portfolio is one alternative format. Some advantages of a digital version are that it is easier to share with readers, allows for inclusion of evidence in multiple media, and offers more options for organization materials.

FIGURE 1. SIMPLIFIED SAMPLE PORTFOLIO SITE MAP



Portfolio Planning Worksheet

Instructions for Use

The Portfolio Planning Worksheet will help you determine what you want your portfolio to communicate and which audiences you want it to address. The worksheet will then aid you in crafting an organizational scheme and selection of evidence suited to the task. (One row in the planning section is filled out as an example.) You also may wish to create a visual site map for your portfolio as you develop its organization. Figure 1 presents the sample information from the worksheet as a site map.

Purpose (What should people know or do when interacting with the portfolio?)			
Audience(s) (Who will be reading the portfolio, and why?)			
Technology (What tools will be used to create and publish the portfolio? What kinds of media will be included?)			
Reflection (Where and how will you incorporate collaborative reflection and action planning?)			
Goal Pages (top level)	Strategy Pages (second level)	Result Pages (third level)	Linked Assets What indicators, stories, and artifacts will be included in this section? What external links will be made?
1. Reduce placement rate of high school graduates into remedial mathematics in college	1.1. Involve teachers and principals in a national online community of practice developing and implementing developmental mathematics materials and strategies	1.1.1. Use of materials that were collaboratively adapted at the building level are associated with improved placement	<ul style="list-style-type: none"> Graph of district placement rates in public institutions across the state, with key professional development milestones noted Video of discussion of materials from national community One high school's localized version of a statistics unit plan Stories from two teachers who taught the unit twice and who participated in the site-based team that developed the unit Link to community website

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Acknowledgements

Future Ready Schools: Empowering Educators Through Professional Learning toolkit was developed under the guidance of Richard Culatta and Bernadette Adams of the U.S. Department of Education, Office of Educational Technology.

Darren Cambridge of the American Institute for Research and Sheryl Nussbaum-Beach of Powerful Learning Practice co-led toolkit development and drafting, including creation of video examples and case studies. Other contributing authors were Marshal Conley, Catherine Green, Michelle Perry, and Claudette Rasmussen of the American Institutes for Research. Lynn Holdheide provided advice and insightful feedback on drafts. Cathy Rasmussen and Lesa Rowe produced graphics and layout.

The primary technical working group for the Connected Educators project also provided key guidance and support. Members of the group include the following:

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